

## NOTES ON ONCIDERES QUERCUS SKINNER.

BY G. BEYER,

NEW YORK CITY.

In 1905 I collected in the Huachuca Mountains, where I took *Oncideres quercus* Skinner. The beetle was not plentiful as I captured only 8 specimens during July and August. I was therefore surprised to see during the latter part of September the amount of work the insect had done and how many had been engaged in this work. *Oncideres* girdles an oak twig about half an inch in diameter at the base and fourteen to twenty-four inches long, gnaws the branch through to near its center, so that it has a very slight hold on the tree, then gnaws as many as six holes about three inches apart in the portion beyond the girdle and deposits an egg in each hole. The girdled twig soon dries up and the wind brings it to the ground. During September there were hundreds of these twigs to be seen all over the mountains. This proved that the beetle was very plentiful. The dry twigs also induce other beetles to make their breeding place in them. I took some of the infested twigs home and awaited results. In 1906 the little Scolytid *Chramesus icoriæ* Lec., came out in great numbers and during the summer there were certainly two broods of this beetle. It seemed to me that there could not be much nourishment left in the twigs for the larval *Oncideres*, which require two years for their development, but, to my surprise, during 1907 about 100 specimens emerged, also 4 specimens of *Pogonoderus negundo* Schaeff., and one *Liopus* sp. nov. The development of the two latter species also required two years. Last October I examined some of the twigs and found quite a number of *Oncideres* larvæ in good condition. This shows that the beetle can stay over even another year if circumstances are unfavorable. I expect to have another crop of this insect this year. How little nourishment the larvæ need is shown by the fact that a single twig half an inch in diameter at the base and twenty inches long contained 80 specimens of *Chramesus icoriæ* and 5 specimens of *Oncideres quercus*.